Patent Claims:

- 1. A method of nebulizing a patient, comprising: providing a nebulizer (34) having an upper semi-spherical
- 5 housing (36) in operative engagement with a lower semispherical housing (44), the upper housing (36) having openings (41, 43) to receive a tube (50), the tube having an upward opening (52) defined therein;

connecting the nebulizer downstream of a filter (20) of

- incoming air of an inhale tube (16) and upstream of a connector (22);
 - adding pressurized air (45) in a tube (48) connected to a bottom (74) of the housing (44);
 - exposing the air (45) to a liquid medication (47) disposed in
- 15 the housing (44);
 - the air (45) aerosolizing the liquid medication (47) into a aerosolized medication (51);
 - the aero-soled medication (51) mixing with inhaling air provided by a ventilator unit (12) and moisturized by the
- 20 filter (20);
 - the aero-soled medication (51) flowing into the opening (52) of the tube (50); and
 - the aero-soled medication (51) flowing into a patient (32).
- 25 2. The method according to claim 1 wherein the method further comprises providing the tube (50) with a bottom inner wall (60) that has a steep section (62) and a gentle section (64).
- 3. The method according to claim 2 wherein the method further comprises the steep section (62) causing a turbulent air flow (68) that exits through the opening (52).
 - 4. The method according to claim 3 wherein the method further comprises the gentle section (64) causing an air flow (70)

that exits through an opening (66) of the tube (50) without escaping through the opening (52).

9

PCT/US2005/006624

WO 2005/102427

- 5. The method according to claim 1 wherein the method further comprises providing the lower housing (44) with a valve (46) having openings (49) to permit the pressurized air (45) into the contact with the liquid medication (47).
- 6. The method according to claim 1 wherein the method further comprises providing the lower housing (44) with a conical wall (56) to create a channel (57) between the wall (56) and the valve (46).
- 7. The method according to claim 1 wherein the method further comprises the evaporated medication (51) flowing on an outside of the tube (50) and over the tube (50) before entering into the opening (52).
- 8. The method according to claim 7 wherein the method further comprises the medication (51) mixing with air in the airflow (68) prior to exiting through an opening (72) of the tube (50).
- 9. The method according to claim 1 wherein the method further comprises turning the nebulizer (34) up to a 45 degree angle alpha relative to a horizontal plane while permitting the pressurized air (45) to encounter the liquid medication (47).
- 10. The method according to claim 9 wherein the method 30 further comprises providing the upper housing (36) with an opening (40) for receiving the liquid medication (47).